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55	LYNNLALHLASDFFFLKHPGKDVRLLVACCLADIFR	YAPEAAPYTS	PDKLKDIFMFITRQLKG	117
196	LDTVLVNLVPAHKNLNKQAYDL	LMLGKTSISDLSEHVF	FDLILELYNIDSHLLLSSVLPQ	217 241 277
319	LGRFNDIHVPIRLECVKFASHCCLMNHFDL	AKDLTEYL	VTAAKDILLVNDHLLNFVRERTLDKRMWV	355 375 404

FIG. 2

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att ttc acc cag cta tac aga acc tta ttt tca gtt ata aac aat ggc	653		
Ile Phe Thr Gln Leu Tyr Arg Thr Leu Phe Ser Val Ile Asn Asn Gly			
155	160	165	
cac aat cag aaa gtc cat atg cac atg gta gac ctt atg agc tct att	701		
His Asn Gln Lys Val His Met His Met Val Asp Leu Met Ser Ser Ile			
170	175	180	
att tgt gaa ggt gat aca gtg tct cag gag ctt ttg gat acg gtt tta	749		
Ile Cys Glu Gly Asp Thr Val Ser Gln Glu Leu Leu Asp Thr Val Leu			
185	190	195	200
gta aat ctg gta cct gct cat aag aat tta aac aag caa gca tat gat	797		
Val Asn Leu Val Pro Ala His Lys Asn Leu Asn Lys Gln Ala Tyr Asp			
205	210	215	
ttg gca aag gct tta ctg aag agg aca gct caa gct att gag cca tat	845		
Leu Ala Lys Ala Leu Leu Lys Arg Thr Ala Gln Ala Ile Glu Pro Tyr			
220	225	230	
att acc act ttt ttt aat cag gtt ctg atg ctt ggg aaa aca tct atc	893		
Ile Thr Thr Phe Phe Asn Gln Val Leu Met Leu Gly Lys Thr Ser Ile			
235	240	245	
agc gat ttg tca gag cat gtc ttt gac tta att ttg gag ctc tac aat	941		
Ser Asp Leu Ser Glu His Val Phe Asp Leu Ile Leu Glu Leu Tyr Asn			
250	255	260	
att gat agt cat ttg ctg ctc tct gtt tta ccc cag ctt gaa ttt aaa	989		
Ile Asp Ser His Leu Leu Leu Ser Val Leu Pro Gln Leu Glu Phe Lys			
265	270	275	280
tta aag agc aat gat aat gag gag cgc cta caa gtt gtt aaa cta ctg	1037		
Leu Lys Ser Asn Asp Asn Glu Glu Arg Leu Gln Val Val Lys Leu Leu			
285	290	295	
gca aaa atg ttt ggg gca aag gat tca gaa ttg gct tct caa aac aag	1085		
Ala Lys Met Phe Gly Ala Lys Asp Ser Glu Leu Ala Ser Gln Asn Lys			
300	305	310	
cca ctt tgg cag tgc tac ttg ggc agg ttt aat gat atc cat gta cca	1133		
Pro Leu Trp Gln Cys Tyr Leu Gly Arg Phe Asn Asp Ile His Val Pro			
315	320	325	

FIG. 6-2

atc cgc ctg gaa tgt gtg aaa ttt gct agc cat tgt ctc atg aac cat Ile Arg Leu Glu Cys Val Lys Phe Ala Ser His Cys Leu Met Asn His 330 335 340	1181
cct gat tta gca aaa gac tta aca gag tat ctt aaa gtg agg tca cat Pro Asp Leu Ala Lys Asp Leu Thr Glu Tyr Leu Lys Val Arg Ser His 345 350 355 360	1229
gac cct gag gaa gct att aga cat gat gtt att gtg tca ata gtt aca Asp Pro Glu Glu Ala Ile Arg His Asp Val Ile Val Ser Ile Val Thr 365 370 375	1277
gct gct aaa aag gat att ctt ctg gtc aat gat cac tta ctt aat ttt Ala Ala Lys Lys Asp Ile Leu Leu Val Asn Asp His Leu Leu Asn Phe 380 385 390	1325
gtg aga gag aga aca tta gac aaa cga tgg aga gta cgc aaa gaa gcc Val Arg Glu Arg Thr Leu Asp Lys Arg Trp Arg Val Arg Lys Glu Ala 395 400 405	1373
atg atg gga ctt gcc caa att tat aag aaa tat gct tta cag tca gca Met Met Gly Leu Ala Gln Ile Tyr Lys Lys Tyr Ala Leu Gln Ser Ala 410 415 420	1421
gct gga aaa gat gct gca aaa cag ata gca tgg atc aaa gac aaa ttg Ala Gly Lys Asp Ala Ala Lys Gln Ile Ala Trp Ile Lys Asp Lys Leu 425 430 435 440	1469
cta cat ata tat tat caa aat agt att gat gat cga cta ctt gtt gaa Leu His Ile Tyr Tyr Gln Asn Ser Ile Asp Asp Arg Leu Leu Val Glu 445 450 455	1517
cgg atc ttt gct caa tac atg gtt cct cac aat tta gaa act aca gaa Arg Ile Phe Ala Gln Tyr Met Val Pro His Asn Leu Glu Thr Thr Glu 460 465 470	1565
cgg atg aaa tgc tta tat tac ttg tat gcc aca ctg gat tta aat gct Arg Met Lys Cys Leu Tyr Tyr Leu Tyr Ala Thr Leu Asp Leu Asn Ala 475 480 485	1613
gtg aaa gca ttg aat gaa atg tgg aaa tgt caa aat ctg ctc cga cat Val Lys Ala Leu Asn Glu Met Trp Lys Cys Gln Asn Leu Leu Arg His 490 495 500	1661

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caa gta aag gat ttg ctt gac ttg att aag caa ccc aaa aca gat gcc			1709
Gln Val Lys Asp Leu Leu Asp Leu Ile Lys Gln Pro Lys Thr Asp Ala			
505	510	515	520
agt gtc aag gcc ata ttt tca aaa gtg atg gtt att aca aga aat tta			1757
Ser Val Lys Ala Ile Phe Ser Lys Val Met Val Ile Thr Arg Asn Leu			
525	530	535	
cct gat cct ggt aag gct cag gat ttc atg aag aaa ttc aca cag gtg			1805
Pro Asp Pro Gly Lys Ala Gln Asp Phe Met Lys Phe Thr Gln Val			
540	545	550	
tta gaa gat gat gag aaa ata aga aag cag tta gaa gta ctt gtt agt			1853
Leu Glu Asp Asp Glu Lys Ile Arg Lys Gln Leu Glu Val Leu Val Ser			
555	560	565	
cca aca tgc tcc tgc aag cag gct gaa ggt tgt gtg cgt gaa ata act			1901
Pro Thr Cys Ser Cys Lys Gln Ala Glu Gly Cys Val Arg Glu Ile Thr			
570	575	580	
aag aag ttg ggc aac ccc aaa cag cct aca aat cct ttc ctg gaa atg			1949
Lys Lys Leu Gly Asn Pro Lys Gln Pro Thr Asn Pro Phe Leu Glu Met			
585	590	595	600
atc aag ttt ctc ttg gag agg ata gca cct gtg cac ata gat acc gaa			1997
Ile Lys Phe Leu Leu Glu Arg Ile Ala Pro Val His Ile Asp Thr Glu			
605	610	615	
tct atc agt gct ctt att aaa caa gtg aac aaa tca ata gat gga aca			2045
Ser Ile Ser Ala Leu Ile Lys Gln Val Asn Lys Ser Ile Asp Gly Thr			
620	625	630	
gca gat gat gaa gat gag ggt gtt cca act gat caa gcc atc aga gca			2093
Ala Asp Asp Glu Asp Glu Gly Val Pro Thr Asp Gln Ala Ile Arg Ala			
635	640	645	
ggt ctt gaa ctg ctt aag gta ctc tca ttt aca cat ccc atc tca ttt			2141
Gly Leu Glu Leu Leu Lys Val Leu Ser Phe Thr His Pro Ile Ser Phe			
650	655	660	
cat tct gct gaa aca ttt gaa tca tta ctg gct tgt ctg aaa atg gat			2189
His Ser Ala Glu Thr Phe Glu Ser Leu Leu Ala Cys Leu Lys Met Asp			
665	670	675	680

FIG. 6-4

gat gaa aaa gta gca gaa gct gca cta caa att ttc aaa aac aca gga	685	690	695	2237
Asp Glu Lys Val Ala Glu Ala Ala Leu Gln Ile Phe Lys Asn Thr Gly				
agc aaa att gaa gag gat ttt cca cac atc aga tca gcc ttg ctt cct	700	705	710	2285
Ser Lys Ile Glu Glu Asp Phe Pro His Ile Arg Ser Ala Leu Leu Pro				
gtt tta cat cac aaa tct aaa aaa gga ccc ccc cgt caa gcc aaa tat	715	720	725	2333
Val Leu His His Lys Ser Lys Lys Gly Pro Pro Arg Gln Ala Lys Tyr				
gcc att cat tgt atc cat gcg ata ttt tct agt aaa gag acc cag ttt	730	735	740	2381
Ala Ile His Cys Ile His Ala Ile Phe Ser Ser Lys Glu Thr Gln Phe				
gca cag ata ttt gag cct ctg cat aag agc cta gat cca agc aac ctg	745	750	755	2429
Ala Gln Ile Phe Glu Pro Leu His Ser Leu Asp Pro Ser Asn Leu				
gaa cat ctc ata aca cca ttg gtt act att ggt cat att gct ctc ctt	765	770	775	2477
Glu His Leu Ile Thr Pro Leu Val Thr Ile Gly His Ile Ala Leu Leu				
gca cct gat caa ttt gct gct cct tgg aaa tct tgg gta gct act ttc	780	785	790	2525
Ala Pro Asp Gln Phe Ala Ala Pro Trp Lys Ser Trp Val Ala Thr Phe				
att gtg aaa gat ctt ctc atg aat gat cgg ctt cca ggg aaa aag aca	795	800	805	2573
Ile Val Lys Asp Leu Leu Met Asn Asp Arg Leu Pro Gly Lys Thr				
act aaa ctt tgg gtt cca gat gaa gaa gta tct cct gag aca atg gtc	810	815	820	2621
Thr Lys Leu Trp Val Pro Asp Glu Glu Val Ser Pro Glu Thr Met Val				
aaa att cag gct att aaa atg atg gtt cga tgg cta ctt gga atg aaa	825	830	835	2669
Lys Ile Gln Ala Ile Lys Met Met Val Arg Trp Leu Leu Gly Met Lys				
aat aat cac agt aaa tca gga act tct acc tta aga ttg cta aca aca	845	850	855	2717
Asn Asn His Ser Lys Ser Gly Thr Ser Thr Leu Arg Leu Leu Thr Thr				

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ata ttg cat agt gat gga gac ttg aca gaa cag ggg aaa att agt aaa Ile Leu His Ser Asp Gly Asp Leu Thr Glu Gln Gly Lys Ile Ser Lys 860 865 870	2765
cca gat atg tca cgt ctg aga ctt gct gct ggg agt gct att gtg aag Pro Asp Met Ser Arg Leu Arg Leu Ala Ala Gly Ser Ala Ile Val Lys 875 880 885	2813
ctg gca caa gaa ccc tgt tac cat gaa atc atc aca tta gaa caa tat Leu Ala Gln Glu Pro Cys Tyr His Glu Ile Ile Thr Leu Glu Gln Tyr 890 895 900	2861
cag cta tgt gca tta gct atc aac gat gaa tgc tat caa gta aga caa Gln Leu Cys Ala Leu Ala Ile Asn Asp Glu Cys Tyr Gln Val Arg Gln 905 910 915 920	2909
gtg ttt gcc cag aaa ctt cac aaa ggc ctt tcc cgt tta cgg ctt cca Val Phe Ala Gln Lys Leu His Lys Gly Leu Ser Arg Leu Arg Leu Pro 925 930 935	2957
ctt gag tat atg gca atc tgt gcc ctt tgt gca aaa gat cct gta aag Leu Glu Tyr Met Ala Ile Cys Ala Leu Cys Ala Lys Asp Pro Val Lys 940 945 950	3005
gag aga aga gct cat gct agg caa tgt ttg gtg aaa aat ata aat gta Glu Arg Arg Ala His Ala Arg Gln Cys Leu Val Lys Asn Ile Asn Val 955 960 965	3053
agg cg ^g gag tat ctg aag cag cat gca gct gtt agt gaa aaa tta ttg Arg Arg Glu Tyr Leu Lys Gln His Ala Ala Val Ser Glu Lys Leu Leu 970 975 980	3101
tct ctt cta cca gag tat gtt gtt cca tat aca att cac ctt ttg gca Ser Leu Leu Pro Glu Tyr Val Val Pro Tyr Thr Ile His Leu Leu Ala 985 990 995 1000	3149
cat gac cca gat tat gtc aaa gta cag gat att gaa caa ctt aaa gat His Asp Pro Asp Tyr Val Lys Val Gln Asp Ile Glu Gln Leu Lys Asp 1005 1010 1015	3197
gtt aaa gaa tgt ctt tgg ttt gtt ctg gaa ata tta atg gct aaa aat Val Lys Glu Cys Leu Trp Phe Val Leu Glu Ile Leu Met Ala Lys Asn 1020 1025 1030	3245

FIG. 6-6

gaa aat aac agt cac gct ttt atc aga aag atg gta gaa aat att aaa	3293
Glu Asn Asn Ser His Ala Phe Ile Arg Lys Met Val Glu Asn Ile Lys	
1035 1040 1045	
caa aca aaa gat gcc caa gga cca gat gat gca aaa atg aat gaa aaa	3341
Gln Thr Lys Asp Ala Gln Gly Pro Asp Asp Ala Lys Met Asn Glu Lys	
1050 1055 1060	
ctg tac act gtg tgt gat gtt gcc atg aat atc atc atg tca aag agt	3389
Leu Tyr Thr Val Cys Asp Val Ala Met Asn Ile Ile Met Ser Lys Ser	
1065 1070 1075 1080	
act aca tac agt ttg gaa tct cct aaa gac ccg gta cta cca gct cgt	3437
Thr Thr Tyr Ser Leu Glu Ser Pro Lys Asp Pro Val Leu Pro Ala Arg	
1085 1090 1095	
ttc ttc act caa cct gac aag aat ttc agt aac acc aaa aat tat ctg	3485
Phe Phe Thr Gln Pro Asp Lys Asn Phe Ser Asn Thr Lys Asn Tyr Leu	
1100 1105 1110	
cct cct gaa atg aaa tca ttt ttc act cct gga aaa cct aaa aca acc	3533
Pro Pro Glu Met Lys Ser Phe Phe Thr Pro Gly Lys Pro Lys Thr Thr	
1115 1120 1125	
aat gtt cta gga gct gtt aac aag cca ctt tca tca gca ggc aag caa	3581
Asn Val Leu Gly Ala Val Asn Lys Pro Leu Ser Ser Ala Gly Lys Gln	
1130 1135 1140	
tct cag acc aaa tca tca cga atg gaa act gta agc aat gca agc agc	3629
Ser Gln Thr Lys Ser Ser Arg Met Glu Thr Val Ser Asn Ala Ser Ser	
1145 1150 1155 1160	
agc tca aat cca agc tct cct gga aga ata aag ggg agg ctt gat agt	3677
Ser Ser Asn Pro Ser Ser Pro Gly Arg Ile Lys Gly Arg Leu Asp Ser	
1165 1170 1175	
tct gaa atg gat cac agt gaa aat gaa gat tac aca atg tct tca cct	3725
Ser Glu Met Asp His Ser Glu Asn Glu Asp Tyr Thr Met Ser Ser Pro	
1180 1185 1190	
ttg ccg ggg aaa aaa agt gac aag aga gac gac tct gat ctt gta agg	3773
Leu Pro Gly Lys Lys Ser Asp Lys Arg Asp Asp Ser Asp Leu Val Arg	
1195 1200 1205	

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tct gaa ttg gag aag cct aga ggc agg aaa aaa acg ccc gtc aca gaa	3821
Ser Glu Leu Glu Lys Pro Arg Gly Arg Lys Lys Thr Pro Val Thr Glu	
1210 1215 1220	
cag gag gag aaa tta ggt atg gat gac ttg act aag ttg gta cag gaa	3869
Gln Glu Glu Lys Leu Gly Met Asp Asp Leu Thr Lys Leu Val Gln Glu	
1225 1230 1235 1240	
cag aaa cct aaa ggc agt cag cga agt cg ^g aaa aga ggc cat acg gct	3917
Gln Lys Pro Lys Gly Ser Gln Arg Ser Arg Lys Arg Gly His Thr Ala	
1245 1250 1255	
tca gaa tct gat gaa cag cag tgg cct gag gaa aag agg ctc aaa gaa	3965
Ser Glu Ser Asp Glu Gln Gln Trp Pro Glu Glu Lys Arg Leu Lys Glu	
1260 1265 1270	
gat ata tta gaa aat gaa gat gaa cag aat agt ccg cca aaa aag ggt	4013
Asp Ile Leu Glu Asn Glu Asp Glu Gln Asn Ser Pro Pro Lys Lys Gly	
1275 1280 1285	
aaa aga ggc cga cca cca aaa cct ctt ggt gga ggt aca cca aaa gaa	4061
Lys Arg Gly Arg Pro Pro Lys Pro Leu Gly Gly Thr Pro Lys Glu	
1290 1295 1300	
gag cca aca atg aaa act tct aaa aaa gga agc aaa aaa aaa tct gga	4109
Glu Pro Thr Met Lys Thr Ser Lys Lys Gly Ser Lys Lys Ser Gly	
1305 1310 1315 1320	
cct cca gca cca gag gag gag gaa gaa gaa aga caa agt gga aat	4157
Pro Pro Ala Pro Glu Glu Glu Glu Glu Arg Gln Ser Gly Asn	
1325 1330 1335	
acg gaa cag aag tcc aaa agc aaa cag cac cga gtg tca agg aga gca	4205
Thr Glu Gln Lys Ser Lys Gln His Arg Val Ser Arg Arg Ala	
1340 1345 1350	
cag cag aga gca gaa tct cct gaa tct agt gca att gaa tcc aca cag	4253
Gln Gln Arg Ala Glu Ser Pro Glu Ser Ser Ala Ile Glu Ser Thr Gln	
1355 1360 1365	
tcc aca cca cag aaa gga cga gga aga cca tca aaa acg cca tca cca	4301
Ser Thr Pro Gln Lys Gly Arg Gly Arg Pro Ser Lys Thr Pro Ser Pro	
1370 1375 1380	

FIG. 6-8

tca caa cca aaa aaa aat gtg taagttgtaa atattacatt tcaaaccaat 4352
 Ser Gln Pro Lys Lys Asn Val End
 1385 1390

ttcaaattat tttgcaaaag ttcctaaatt tgtaaacata catattgctg tatttaaattt 4412
 ccatatatttt agccccatta cactaggtac ggcggcgaag tgctaaaagg gaacggcgt 4472
 gaacaaatgt aattaataac tttctctgtg aaagcttgg aaaaatctt tttttttt 4532
 ttttttttgg tcaagcttg aggctgata aagccttga tgcacaaaat gggactgctg 4592
 aagagtggac agttggacct tactttggtg accccataca tttgtggtca catgctttag 4652
 ccatacacat ggtaacattt actatggagt cttgtgaaag tgaatgtgc gatggctatg 4712
 tagacataaa gaagaaactt gtaaatatct ttttctttt ttttaatgtt tctgatttct 4772
 gaagtgcctg tatagctttt atctgcggct ttaaactgac agtacccgac tgtttattgg 4832
 atctattgat ttgaaaagaa tttgttagga tagatcttaa gcagtaatct gtcagtgttt 4892
 gtatttgtat tttctgcaat tttactgtga aaaaaaattt gtttcaaca attgggtgtca 4952
 ttttcttgat gtcactattt gtggagagt taaatggtct cttccctttg tgtatcttac 5012
 ctatgttta ctccctggca cccttaatct tcagaggtgc taaattgtct gccattacac 5072
 cagaaggatg cctctgatag gaggacaacc atgcaaattt tgaaatagtc ctgaagttct 5132
 tggattactt tacacctcag tattgatttgc tccagaatt ttctggcctt tcatggcaat 5192
 gaaaatttta agaagaaaga tttaaagtat tttaaatttta aagagtgtgt tataaaataa 5252
 tgtactgaat tctttatccc attttatcat ctttcagtt tttattaatc tactgtatca 5312
 ataaaattct gtaattgaa ttagaaaaaaa aaaaaaaaaaaa aaa 5355